

***City Pension Fund  
for Firefighters and Police Officers  
in the City of Miami Beach***

**Actuarial Valuation Report  
as of  
October 1, 2008**

**To Determine Annual Contributions  
For the Plan Year October 1, 2008  
Through September 30, 2009  
To be Paid in the Fiscal Year October 1, 2009  
Through September 30, 2010**

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April 24, 2009

Board of Trustees  
City Pension Fund for Firefighters and Police Officers  
in the City of Miami Beach  
1691 Michigan Avenue, Suite 355  
Miami Beach, FL 33139-2557

Dear Members of the Board:

This report presents the results of the October 1, 2008 actuarial valuation of the City Pension Fund for Firefighters and Police Officers in the City of Miami Beach. This valuation will be used to determine the contributions for the City's fiscal year beginning October 1, 2009.

#### **Plan Amendments and Other Changes Affecting the Financial Status of the Fund**

The assumptions used in the valuation are outlined in Table XI. Provisions of the plan are set forth in Table XII. The valuation assumptions were updated as of October 1, 2008 and reflect changes to the discount rate, the salary scale, the retirement assumptions, the loadings for overtime and other pays, and the service buyback costs. In addition the Pension Fund will be undertaking an experience study as of October 1, 2008, to review all the valuation assumptions and additional assumption changes (if required), will be reflected in the October 1, 2009 valuation.

#### **Summary of Valuation Results**

The City contribution requirement for the fiscal year beginning October 1, 2009 is summarized below, payable at October 1, 2009.

Required City contribution for plan year beginning 10/1/2009	\$23,283,269
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The City's contribution increased from \$20,039,446 for the 2008/2009 fiscal year to \$23,283,269 for the 2009/2010 fiscal year. The increase in the contribution requirement is due primarily to the higher than expected pay increases, 8.77% compared to an expected 4.40%, and the asset losses (Market Value Return of -10.43% and Actuarial Value Return of 4.87% vs. expected return of 8.50%) incurred over the 2007/2008 fiscal year.

Board of Trustees  
April 24, 2009

In addition to the City Contributions, there are expected member contributions of \$4,208,505 and contributions from the Share Plans of \$120,549 to fund the ten year certain and life form of benefit payment.

The City contribution requirements presented above for the 2009/2010 fiscal year reflect an annual payment at the beginning of the fiscal year, which is our understanding of the City's payment schedule. Below we present a breakdown of the interest adjustment to reflect the annual payment for the period October 1, 2009 through September 30, 2010 with the payment due on October 1, 2009.

Normal Cost at October 1, 2008	\$11,294,379
Payment to Amortize Unfunded Liability at October 1, 2008	\$11,256,706
Total	\$22,551,085
Interest at 8.40% per year	\$ 1,894,291
Preliminary Minimum Required Contribution	\$24,445,376
Estimated Service Buybacks at October 1, 2009	\$ 2,525,103
Estimated Administrative Expenses at October 1, 2009	\$ 641,844
Total Minimum Required Contribution payable October 1, 2009	\$27,612,323
Expected Member Contributions	(\$4,208,505)
Expected Share Plan Contributions	(\$ 120,549)
Estimated City Contribution payable on October 1, 2009	\$23,283,269

### **GASB 25/27 Information**

Governmental Accounting Standards Board Statement Nos. 25 and 27 (GASB 25/27) require the disclosure of certain information. GASB 25 requires disclosure of funding progress and GASB 27 requires the calculation of the net pension obligation and annual pension cost. Results for the 2007/2008 and 2008/2009 fiscal years are shown in Table III.

### **Contents of the Report**

A summary of the results of the valuation is presented in Table I. Information for the auditors can be found in Tables III and IV. Information required by the State of Florida to be disclosed under Chapter 112 is presented in Tables V and Va. Finally, Tables VI through VIII provide information about the fund's assets, while Tables IX through IXf provide information about the membership data. Table X is the Historical Contribution Rates.

Board of Trustees  
April 24, 2009

### **Certification**

This actuarial valuation and/or cost determination was prepared and completed by us or under our direct supervision and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate and, in our opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

In addition, we certify that we have experience in performing actuarial valuations for public sector retirement systems, that the valuation was prepared in accordance with the standards of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Pension Fund and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Fund.

The first signatory below is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Very truly yours,



Kerry Schmidt, FSA, MAAA  
Principal  
Enrollment No. 08-2628



David P. Campbell  
Consultant

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# SUMMARY OF VALUATION RESULTS

TABLE I

	As of October 1, 2007	As of October 1, 2008
<b>1. Number of Members</b>		
a. Active Members	482	487
b. Deferred Vested Members	17	14
c. Retired Members:		
i. Non-disabled	420	441
ii. Disabled	61	62
iii. Beneficiaries	91	98
iv. Sub-total	572	601
d. Total Members	1,071	1,102
<b>2. Total Annual Compensation</b>		
a. Base Pay	\$38,705,407	\$40,661,885
b. Projected Payroll (Base Pay)	\$40,060,096	\$42,085,051
c. Projected Pensionable Pay	\$50,668,549	\$53,153,934
d. Projected Pensionable Pay (plus DROP)	\$58,243,398	\$59,275,538
<b>3. Total Retired Member Benefits</b>	\$33,930,403	\$37,220,325
<b>4. Annual Cost</b>		
a. Present Value of Future Benefits	\$712,545,018	\$765,475,606
b. Present Value of Future Normal Cost	\$79,552,431	\$81,743,662
<i>City Portion</i>	\$44,331,719	\$44,719,347
<i>Member Portion</i>	\$35,220,712	\$37,024,315
c. Actuarial Accrued Liability (AAL)	\$632,992,587	\$683,731,944
d. Actuarial Value of Assets	(\$495,993,903)	(\$507,363,813)
e. Unfunded AAL (UAAL)	\$136,998,684	\$176,368,131
f. Normal Cost	\$10,858,898	\$11,294,379
g. Payment to Amortize Unfunded Liability	\$8,787,288	\$11,256,706
h. Interest Adjustment	\$1,669,926	\$1,894,291
i. Service Buyback	\$2,203,305	\$2,525,103
j. Administrative Expenses	\$646,588	\$641,844
k. Total	\$24,166,005	\$27,612,323
l. Expected Member Contributions	\$4,006,010	\$4,208,505
m. Expected Share Plans Contributions	\$120,549	\$120,549
n. Estimated City Contributions	\$20,039,446	\$23,283,269
o. Total	\$24,166,005	\$27,612,323
<b>5. Annual Cost (as a % of Projected Payroll)</b>		
a. Total Required Contribution	60.32%	65.61%
b. Estimated Share Plans Contribution	0.30%	0.29%
c. Expected Member Contribution	10.00%	10.00%
d. Estimated City Contribution (4n./2b.)	50.02%	55.32%
e. <i>Estimated City Contribution (4n./2c.)</i>	39.55%	43.80%
f. <i>Estimated City Contribution (4n./2d.)</i>	34.41%	39.28%

<b>1. Actual Unfunded Accrued Liability as of October 1, 2007</b>	<b>\$136,998,684</b>
<b>2. Expected Change in Unfunded Liability During the 2007/2008 Plan Year</b>	
a. Due to Employer Normal Cost for Benefits	\$10,625,787
b. Due to Interest on the Unfunded Liability	\$11,644,888
c. Expected City and State Contributions	<u>(\$20,159,995)</u>
d. Total Expected Change	<u>\$2,110,680</u>
<b>3. Expected Unfunded Accrued Liability as of October 1, 2008</b>	<u><u>\$139,109,364</u></u>
<b>4. Change in Unfunded Liability During the 2007/2008 Plan Year Due to:</b>	
a. Method changes	\$0
b. Assumption changes	\$5,715,022
c. Plan amendments	\$0
d. Experience	<u>\$31,543,745</u>
e. Total change	<u>\$37,258,767</u>
<b>5. Actual Unfunded Accrued Liability as of October 1, 2008</b>	<u><u>\$176,368,131</u></u>
<b>6. Items Affecting Calculation of Accrued Liability</b>	
a. Plan provisions reflected in the accrued liability (see Table XII on page 34)	
b. Plan amendments reflected in item 4.c. above (see on page 38)	
c. Actuarial assumptions and methods used to determine accrued liability (see Table XI on page 30)	
d. Changes in actuarial assumptions and methods reflected in items 4.a. and 4.b. above (see on page 33)	

**UNFUNDED ACCRUED LIABILITY CONTRIBUTION RATE CHANGE****TABLE II**  
**(continued)**

<b>7. Expected Unfunded Accrued Liability Contribution Rate as of October 1, 2007</b>	<b>21.94%</b>
<b>8. Net Actuarial (Gains)/Losses During the 2007/2008 Plan Year</b>	
a. Due to Salary/Service/Data	0.94%
b. Due to Investment Performance	2.95%
c. Due to Turnover/Mortality	0.00%
d. Due to New Retirements and Retirement Benefits	1.89%
e. Due to New Members	<u>0.00%</u>
f. Total	5.78%
<b>9. Change in Unfunded Accrued Liability Rate During the 2007/2008 Plan Year Due to:</b>	
a. Assumption changes	0.90%
b. Method changes	0.00%
c. System benefit changes	<u>0.00%</u>
d. Total Change	0.90%
<b>10. Other Effects</b>	<u>(1.49%)</u>
<b>11. Unfunded Accrued Liability Contribution Rate as of October 1, 2008</b>	<u><u>28.99%</u></u>
<b>12. Comments on Change in Unfunded Accrued Liability Contribution Rate:</b>	
<b><u>Salary/Service/Data:</u></b> Salary increases and adjustments in the reported data. Actual salary increases averaged 8.77% compared to expected increase of 4.4%.	
<b><u>Investment Performance:</u></b> -10.48% actual vs. 8.5% expected return on the actuarial value of assets.	
<b><u>Turnover/Mortality:</u></b> Net effect on the valuation liabilities of actual deaths, retirements, terminations of employment and disabilities different from what was anticipated in the aggregate by the assumptions related to those events.	
<b><u>New Retirements and Retirement Benefits:</u></b> Greater than expected number of and amount of benefits for new retirements.	
<b><u>Other effects:</u></b> This item captures all other effects that contributed to the overall experience loss that are not detailed items 8 and 9 above. Effects included in this item are "pickups" of plan participants not valued in the prior year, catch-up COLAs for participants who retired more than 1 year and less than 2 years, and data corrections/adjustments from the prior year.	



	Plan Year 2007/2008	Plan Year 2008/2009
<b>A. Number of Plan Participants as of October 1</b>		
a. Retirees and beneficiaries receiving benefits	572	601
b. Terminated plan participants entitled to but not yet receiving benefits	17	14
c. Active plan participants	482	487
d. Total	1,071	1,102
<b>B. Development of Annual Required Contribution (ARC)</b>		
a. Employer normal cost:		
i. Total normal cost	\$13,584,504	\$13,708,791
ii. Expected employee contribution	(\$3,659,219)	(\$4,006,010)
iii. Employer normal cost	\$9,925,285	\$9,702,781
b. Amortization of UAAL:		
i. PV of future benefits	\$656,373,677	\$712,545,018
ii. PV of future employer normal costs	(\$42,313,343)	(\$44,331,719)
iii. PV of future employee contributions	(\$32,044,038)	(\$35,220,712)
iv. Actuarial accrued liability (AAL)	\$582,016,296	\$632,992,587
v. Actuarial value of assets	(\$470,603,144)	(\$495,993,903)
vi. Unfunded AAL (UAAL)	\$111,413,152	\$136,998,684
vii. Amort. of UAAL	\$7,692,760	\$9,534,208
c. ARC	\$17,618,045	\$19,236,989
(Item B.a.iii. plus item B.b.vii.)		
<b>C. Annual Pension Cost and Net Pension Obligation (NPO)</b>		
a. ARC	\$17,618,045	\$19,236,989
b. Interest on NPO	\$0	\$0
c. Adjustment to ARC	\$0	\$0
d. Annual Pension Cost	\$17,618,045	\$19,236,989
e. Contributions made	(\$17,618,045)	
f. Increase(decrease) in NPO	\$0	
g. NPO (beginning of year)	\$0	
h. NPO (end of year)	\$0	

## Three Year Trend Information

Year Ended September 30	Annual Pension Cost(APC)	Percentage Contributed	Net Pension Obligation
2006	\$14,601,836	100%	0
2007	\$15,231,417	100%	0
2008	\$17,618,045	100%	0

## Schedule of Funding Progress

Actuarial Valuation Date	(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability (AAL)	(3) Unfunded AAL (UAAL) (2) - (1)	(4) Funded Ratio (1) ÷ (2)	(5) Covered Payroll	(6) UAAL as % of Covered Payroll (3) ÷ (5)
10/1/2003	\$410,423,595	\$468,290,269	\$57,866,674	87.6%	\$32,116,520	180.2%
10/1/2004	\$418,089,222	\$512,038,433	\$93,949,211	81.7%	\$32,725,380	287.1%
10/1/2005	\$457,680,582	\$551,907,648	\$94,227,066	82.9%	\$31,259,918	301.4%
10/1/2006	\$470,603,144	\$582,016,296	\$111,413,152	80.9%	\$35,354,776	315.1%
10/1/2007	\$495,993,903	\$632,992,587	\$136,998,684	78.4%	\$38,705,407	354.0%
10/1/2008	\$507,363,813	\$683,731,944	\$176,368,131	74.2%	\$40,661,885	433.7%

## Additional Information

Valuation date	<u>October 1, 2007</u>	<u>October 1, 2008</u>
Actuarial cost method	Entry Age Normal	Entry Age Normal
Amortization method	Level Percent Closed	Level Percent Closed
Remaining amortization period	24 to 30 Years	23 to 30 Years
Asset valuation method	Market Related Value	Market Related Value
Actuarial assumptions:		
Investment rate of return	8.50%	8.40%
Projected salary increases	4.53% - 10.17%	4.36% - 9.67%
Includes projected payroll	3.50%	3.50%
Cost-of-living adjustments	2.50%	2.50%

**1. Actuarial Present Value of Accrued Benefits**

	<u>As of October 1, 2007</u>	<u>As of October 1, 2008</u>
a. Vested Accrued Benefits:		
i. Participants currently receiving benefits	\$435,085,692	\$481,464,271
ii. Other participants	\$122,837,540	\$125,659,519
iii. Sub-total	<u>\$557,923,232</u>	<u>\$607,123,790</u>
b. Non-vested Accrued Benefits	<u>\$30,177,659</u>	<u>\$33,999,361</u>
c. Total Benefits	<u><b>\$588,100,891</b></u>	<u><b>\$641,123,151</b></u>
d. Market Value of Assets	\$571,193,561	\$499,788,831
e. Percentage Funded	97%	78%

**2. Statement of Changes in Total Actuarial Present Value of All Accrued Benefits**

a. Actuarial Present Value as of October 1, 2007	<b>\$588,100,891</b>
b. Increase (Decrease) During 2007/2008 Plan Year Attributable to:	
i. Interest	\$48,500,453
ii. Benefits accumulated	\$30,960,205
iii. Benefits paid	(\$35,014,659)
iv. Method Change	\$0
v. Plan amendments	\$0
vi. Changes in actuarial assumptions or methods	\$8,576,261
vii. Net increase (decrease)	<u><b>\$53,022,260</b></u>
c. Actuarial Present Value as of October 1, 2008	<u><u><b>\$641,123,151</b></u></u>

**3. Items Affecting Calculation of Actuarial Present Value of Accrued Benefits**

- a. Plan provisions reflected in the accrued benefits (see Table XII page 34)
- b. Actuarial assumptions and methods used to determine present values (see Table XI on page 30)

October 1, 2008

	<u>Police</u>	<u>Firefighters</u>	<u>Total</u>
<b>1. Participant Data</b>			
a. Active members:			
i. Number	319	168	487
ii. Total annual payroll	\$24,955,974	\$15,705,911	\$40,661,885
iii. Projected annual payroll	\$25,829,433	\$16,255,618	\$42,085,051
b. Retired members and beneficiaries:			
i. Number	324	215	539
ii. Total annualized benefit	\$20,634,088	\$13,475,240	\$34,109,328
c. Disabled members receiving benefits:			
i. Number	51	11	62
ii. Total annualized benefit	\$2,609,483	\$501,514	\$3,110,997
d. Terminated vested members:			
i. Number	13	1	14
ii. Total annualized benefit	\$207,020	\$29,711	\$236,731
<b>2. Assets</b>			
a. Actuarial value of assets	n/a	n/a	\$507,363,813
b. Market value of assets	n/a	n/a	\$499,788,831
<b>3. Liabilities</b>			
a. Present value of all future expected benefit payments:			
i. Active members:			
Retirement benefits	\$145,676,073	\$103,102,885	\$248,778,958
Vesting benefits	\$3,085,001	\$1,740,768	\$4,825,769
Disability benefits	\$10,120,536	\$5,788,314	\$15,908,850
Death benefits	\$7,542,235	\$4,365,196	\$11,907,431
Sub-total	\$166,423,845	\$114,997,163	\$281,421,008
ii. Terminated vested members	\$2,238,218	\$352,109	\$2,590,327
iii. Retired members and beneficiaries:			
Retired (other than disabled) and beneficiaries	\$266,521,094	\$174,408,286	\$440,929,380
Disabled members	\$34,778,999	\$5,755,892	\$40,534,891
Sub-total	\$301,300,093	\$180,164,178	\$481,464,271
iv. Member contributions (annuities & refunds)	\$0	\$0	\$0
v. Total present value of all future expected ben. pmts.	\$469,962,156	\$295,513,450	\$765,475,606

October 1, 2008

	<u>Police</u>	<u>Firefighters</u>	<u>Total</u>
b. Liabilities due and unpaid	\$0	\$0	\$0
c. Actuarial accrued liability	\$415,922,426	\$267,809,518	\$683,731,944
d. Entry Age Normal Unfunded actuarial accrued liability	n/a	n/a	\$176,368,131
e. Frozen Initial Liability	n/a	n/a	n/a
<b>4. Actuarial Present Value of Accrued Benefits</b> (please reference Table IV for details concerning the present value of accrued benefits)	\$390,117,276	\$251,005,875	\$641,123,151
<b>5. Pension Cost (as a % of projected payroll)</b>			
a. Normal cost (including administrative expenses):	30.92%	30.14%	30.62%
Dollar amount:	\$7,986,191	\$4,898,760	\$12,884,951
b. Payment to amortize unfunded liability	n/a	n/a	28.99%
Dollar amount:	n/a	n/a	\$12,202,269
c. Service Buyback	6.00%	6.00%	6.00%
Dollar amount:	\$1,549,766	\$975,337	\$2,525,103
c. Amount to be contributed by members	10.00%	10.00%	10.00%
Dollar amount:	\$2,582,943	\$1,625,562	\$4,208,505
d. Expected Share Plans Contributions	0.27%	0.31%	0.29%
Dollar amount:	\$70,669	\$49,880	\$120,549
d. Expected City Contribution	n/a	n/a	55.32%
Dollar amount:	n/a	n/a	\$23,283,269
<b>6. Past Contributions (For year ending September 30,2008)</b>			
a. Required Employer and State contribution	n/a	n/a	\$17,618,045
b. Actual contribution made by:			
i. Employer	n/a	n/a	\$17,497,496
ii. Members	n/a	n/a	\$5,577,298
iii. State (Share Plans)	n/a	n/a	\$120,549

October 1, 2008

	<u>Police</u>	<u>Firefighters</u>	<u>Total</u>
7. Net actuarial (gain)/loss	n/a	n/a	\$31,543,745
8. Other disclosures			
a. Present value of active members':			
i. Future salaries:			
at attained age	\$188,086,766	\$103,590,244	\$291,677,010
at entry age	n/a	n/a	n/a
ii. Future contributions:			
at attained age	\$24,168,667	\$12,855,648	\$37,024,315
at entry age	n/a	n/a	n/a
b. Present value of future contributions from City and State	\$29,871,063	\$14,848,284	\$44,719,347
c. Present value of future expected benefit payments for active members at entry age	n/a	n/a	n/a
d. Amount of active members' accumulated contributions	\$26,102,954	\$16,283,765	\$42,386,719

October 1, 2007

	<u>Police</u>	<u>Firefighters</u>	<u>Total</u>
<b>9. Participant Data</b>			
a. Active members:			
i. Number	317	165	482
ii. Total annual payroll	\$23,823,753	\$14,881,654	\$38,705,407
iii. Projected annual payroll	\$24,657,584	\$15,402,512	\$40,060,096
b. Retired members and beneficiaries:			
i. Number	305	206	511
ii. Total annualized benefit	\$18,489,029	\$12,304,628	\$30,793,657
c. Disabled members receiving benefits:			
i. Number	50	11	61
ii. Total annualized benefit	\$2,613,664	\$523,082	\$3,136,746
d. Terminated vested members:			
i. Number	16	1	17
ii. Total annualized benefit	\$243,050	\$29,711	\$272,761
<b>10. Assets</b>			
Actuarial Value of Assets	n/a	n/a	\$495,993,903
Market Value of Assets	n/a	n/a	\$571,193,561
<b>11. Liabilities</b>			
a. Present value of all future expected benefit payments:			
i. Active members:			
Retirement benefits	\$143,893,388	\$99,207,441	\$243,100,829
Vesting benefits	\$2,852,119	\$1,614,793	\$4,466,912
Disability benefits	\$9,785,071	\$5,672,755	\$15,457,826
Death benefits	\$7,245,324	\$4,241,476	\$11,486,800
Sub-total	\$163,775,902	\$110,736,465	\$274,512,367
ii. Terminated vested members	\$2,627,278	\$319,681	\$2,946,959
iii. Retired members and beneficiaries:			
Retired (other than disabled) and beneficiaries	\$236,208,489	\$157,735,731	\$393,944,220
Disabled members	\$34,995,496	\$6,145,976	\$41,141,472
Sub-total	\$271,203,985	\$163,881,707	\$435,085,692
iv. Member contributions (annuities & refunds)	\$0	\$0	\$0
v. Total present value of all future expected ben. pmts.	\$437,607,165	\$274,937,853	\$712,545,018

**October 1, 2007**

	<b><u>Police</u></b>	<b><u>Firefighters</u></b>	<b><u>Total</u></b>
b. Liabilities due and unpaid	\$0	\$0	\$0
c. Actuarial accrued liability	\$384,997,216	\$247,995,371	\$632,992,587
d. Unfunded actuarial accrued liability	n/a	n/a	\$136,998,684
e. Frozen Initial Liability	n/a	n/a	n/a
<b>12. Actuarial Present Value of Accrued Benefits</b> (please reference Table IV for details concerning the present value of accrued benefits)	<b>\$358,477,971</b>	<b>\$229,622,920</b>	<b>\$588,100,891</b>
<b>13. Pension Cost (as a % of payroll)</b>			
a. Normal cost:	31.18%	30.78%	31.02%
i. Dollar amount:	\$7,687,777	\$4,740,714	\$12,428,491
b. Payment to amortize unfunded liability	n/a	n/a	23.80%
Dollar amount:	n/a	n/a	\$9,534,208
c. Service buyback	5.50%	5.50%	5.50%
Dollar amount:	\$1,356,167	\$847,138	\$2,203,305
d. Amount to be contributed by members	10.00%	10.00%	10.00%
Dollar amount:	\$2,465,758	\$1,540,251	\$4,006,009
e. Expected Share Plans Contributions	0.29%	0.32%	0.30%
Dollar amount:	\$70,669	\$49,880	\$120,549
f. Expected City Contribution	n/a	n/a	50.02%
Dollar amount:	n/a	n/a	\$20,039,446
<b>14. Past Contributions (For year ending September 30,2007)</b>			
a. Required Employer and State contribution	n/a	n/a	\$15,231,417
b. Actual contribution made by:			
i. Employer	n/a	n/a	\$15,110,868
ii. Members	n/a	n/a	\$5,194,282
iii. State (Share Plans)	n/a	n/a	\$120,549



October 1, 2007

	<u>Police</u>	<u>Firefighters</u>	<u>Total</u>
<b>15. Net actuarial (gain)/loss</b>	n/a	n/a	\$23,808,174
<b>16. Other disclosures</b>			
a. Present value of active members':			
i. Future salaries:			
at attained age	\$181,171,723	\$98,983,943	\$280,155,666
at entry age	n/a	n/a	n/a
ii. Future contributions:			
at attained age	\$23,023,024	\$12,197,688	\$35,220,712
at entry age	n/a	n/a	n/a
b. Present value of future contributions from City and State	\$29,586,925	\$14,744,794	\$44,331,719
c. Present value of future expected benefit payments for active members at entry age	n/a	n/a	n/a
d. Amount of active members' accumulated contributions	\$26,341,962	\$15,798,527	\$42,140,489

# UNFUNDED LIABILITY BASES

TABLE Va

Description	Original Amount	Outstanding Balance as of October 1, 2007	2007/2008	Outstanding Balance as of October 1, 2008	2008/2009	Years Remaining
			Actual Amortization Payment		Expected Amortization Payment	
Initial Unfunded Liability	\$11,301,726	\$12,286,647	\$906,490	\$12,424,522	\$929,621	23
10/01/2002 Method Change	\$12,519,763	\$13,691,977	\$988,510	\$13,867,285	\$1,013,430	24
10/01/2003 Amendment	\$1,078,557	\$1,160,337	\$82,093	\$1,176,873	\$84,138	25
10/01/2003 Experience Loss	\$32,473,033	\$34,935,221	\$2,471,630	\$35,433,085	\$2,533,198	25
10/01/2004 Experience Loss	\$34,892,889	\$36,880,547	\$2,560,297	\$37,455,096	\$2,623,323	26
10/01/2005 Method Change	-\$31,074,307	-\$32,231,152	-\$2,198,183	-\$32,772,617	-\$2,251,665	27
10/01/2005 Assumption Change	\$6,250,297	\$6,482,984	\$442,143	\$6,591,895	\$452,901	27
10/01/2005 Experience Loss	\$23,210,540	\$24,074,630	\$1,641,904	\$24,479,070	\$1,681,851	27
10/01/2006 Method Change	-\$4,690,352	-\$4,779,299	-\$320,573	-\$4,864,966	-\$328,283	28
10/01/2006 Experience Loss	\$20,303,584	\$20,688,618	\$1,387,697	\$21,059,454	\$1,421,071	28
10/01/2007 Experience Loss	\$23,808,174	\$23,808,174	\$1,572,200	\$24,259,669	\$1,609,580	29
10/01/2008 Assumption Change	\$5,715,022			\$5,715,022	\$373,207	30
10/01/2008 Experience Loss	\$31,543,745			\$31,543,745	\$2,059,897	30
<b>Total</b>	<b>\$167,332,671</b>	<b>\$136,998,684</b>	<b>\$9,534,208</b>	<b>\$176,368,133</b>	<b>\$12,202,269</b>	

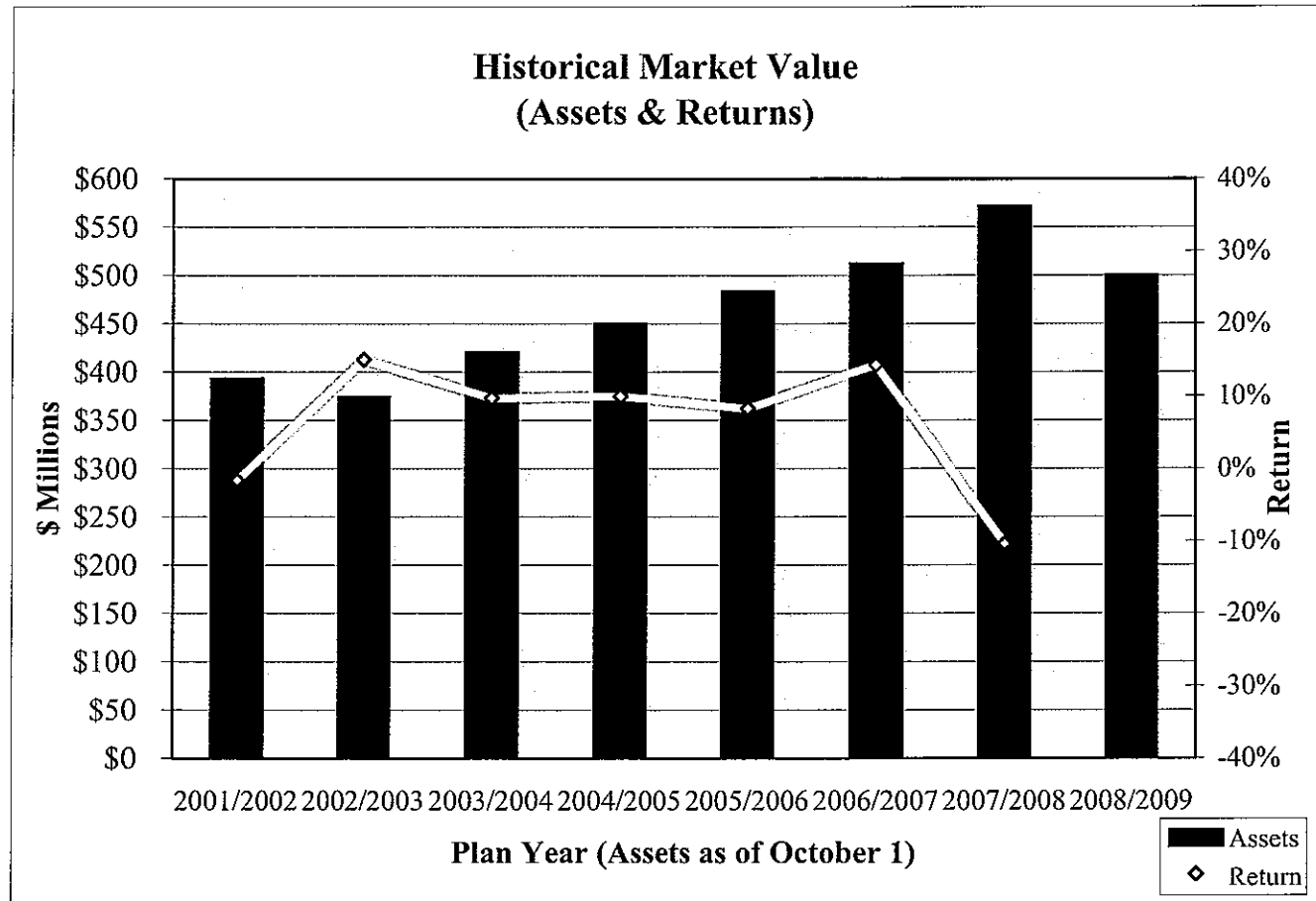
<u>Date</u>	<u>Projected Unfunded Liability</u>
October 1, 2008	\$176,368,133
October 1, 2009	\$178,980,787
October 1, 2010	\$181,385,825
October 1, 2038	\$0

	As of October 1, 2007	As of October 1, 2008
<b>1. Market Value of Assets</b>		
a. Cash and cash equivalents (3%)	\$6,020,000	\$14,988,368
b. U.S. government bonds & notes (12%)	\$75,539,671	\$61,697,272
c. Corporate bonds (28%)	\$141,859,122	\$140,814,206
d. Equities (37%)	\$234,726,015	\$186,689,508
e. Money Market Funds (1%)	\$5,260,968	\$7,195,145
f. Foreign bonds (0%)	\$0	\$0
g. Collective Investment Funds (17%)	\$105,054,959	\$85,447,599
h. Other assets (1%)	\$8,214,182	\$5,175,487
i. Accrued income receivable (1%)	\$2,935,283	\$3,079,178
j. Contributions receivable (0%)	\$165,985	\$171,629
k. Other receivables (0%)	\$0	\$141,462
l. Benefits payable (-1%)	(\$8,214,182)	(\$5,175,487)
m. Other payables (0%)	(\$368,442)	(\$435,536)
n. Market value of assets	<b>\$571,193,561</b>	<b>\$499,788,831</b>

**2. Actuarial Value of Assets**

a. Market value of assets	\$571,193,561	\$499,788,831
b. 5-year phase-in of net investment appreciation:		
i. 2003/2004	\$0	\$0
ii. 2004/2005	(\$31,874,824)	(\$6,374,965)
iii. 2005/2006	(\$27,226,025)	(\$10,890,409)
iv. 2006/2007	(\$57,642,643)	(\$34,585,586)
v. 2007/2008	\$74,282,428	\$59,425,942
vi. Total unrecognized losses(gains)	(\$75,199,658)	\$7,574,982
c. Actuarial Value of Assets	<b>\$495,993,903</b>	<b>\$507,363,813</b>
(Item a. less item b., but within an 80-120% corridor of item a.)		

<b>1. Market Value of Assets as of October 1, 2007</b>	<b>\$571,193,561</b>
<b>2. Increases Due to:</b>	
a. Contributions:	
i. City	\$17,497,496
ii. State (Share Plans)	\$120,549
iii. Members	\$5,577,298
iv. Total	<u>\$23,195,343</u>
b. Investment income (interest and dividends), net of expenses	\$15,338,858
c. Realized and unrealized gains/(losses)	(\$74,282,428)
d. Total increases	<u><u>(\$35,748,227)</u></u>
<b>3. Decreases Due to:</b>	
a. Benefit payments	(\$34,912,004)
b. Refund of member contributions	(\$102,655)
c. Administrative expenses	(\$641,844)
d. Total decreases	<u><u>(\$35,656,503)</u></u>
<b>4. Market Value of Assets as of October 1, 2008</b>	<b>\$499,788,831</b>



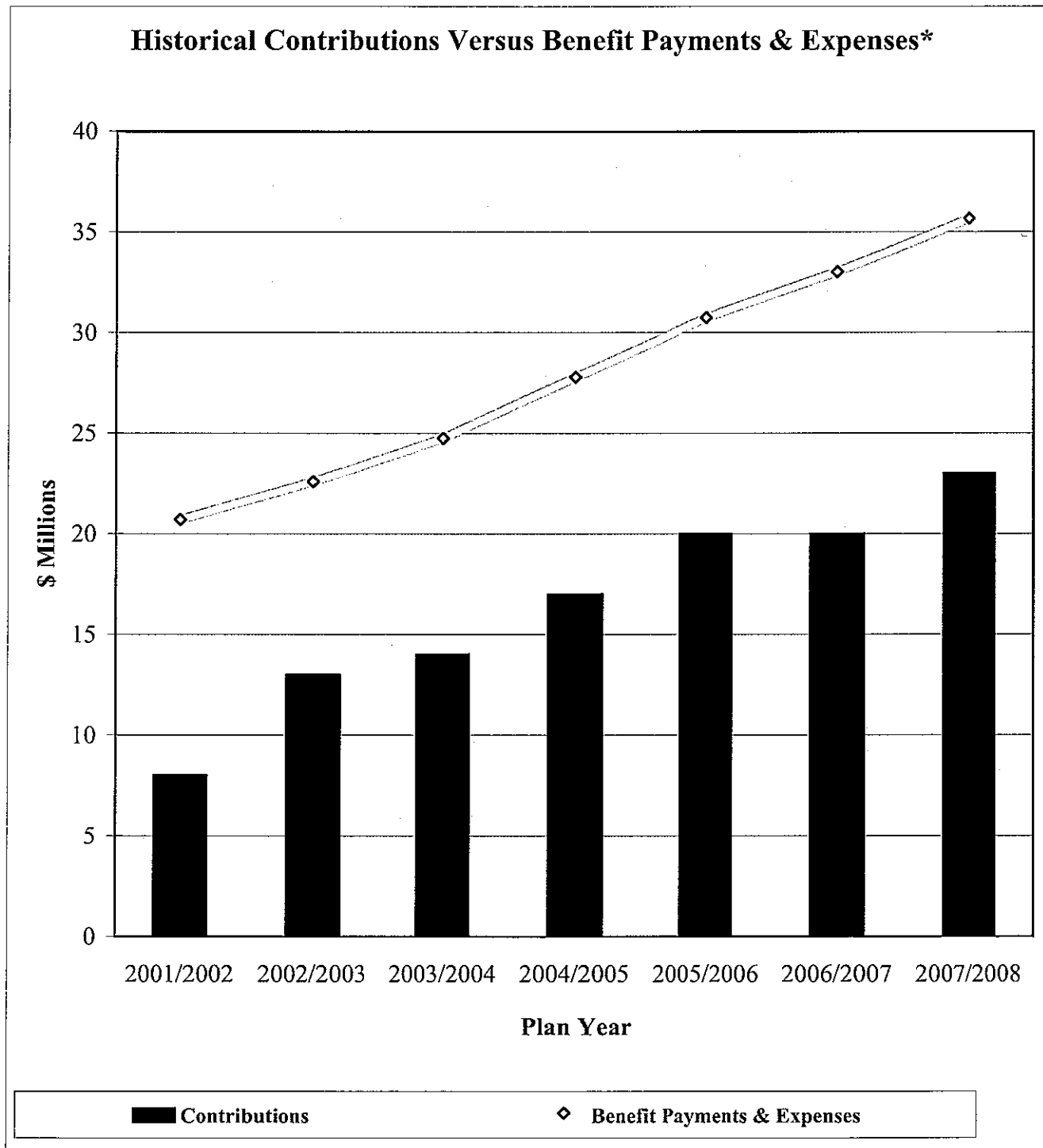
Plan Year	Market Value as of October 1	Actuarial Value as of October 1	Benefit Payments*	Administrative Expenses	City, State and Member Contributions	Market Value Return	Actuarial Value Return
2001/2002	\$393,319,577	\$404,340,268	\$20,210,635	\$498,825	\$7,753,324	-1.65%	2.39%
2002/2003	\$373,980,268	\$400,898,095	\$22,072,374	\$521,173	\$13,014,855	15.05%	4.82%
2003/2004	\$419,972,421	\$410,423,595	\$24,173,338	\$564,532	\$14,082,481	9.72%	4.52%
2004/2005	\$449,622,848	\$418,089,222	\$27,202,700	\$581,953	\$16,960,734	9.99%	12.22%
2005/2006	\$483,180,441	\$457,680,582	\$30,109,229	\$633,113	\$19,517,106	8.28%	5.34%
2006/2007	\$511,508,858	\$470,603,144	\$32,367,302	\$646,588	\$20,425,699	14.31%	8.18%
2007/2008	\$571,193,561	\$495,993,903	\$35,014,659	\$641,844	\$23,195,343	-10.43%	4.87%
2008/2009	\$499,788,831	\$507,363,813					

\* includes contributions refunded

**REVENUES BY SOURCE AND EXPENSES BY TYPE****TABLE VIIa**

<b>REVENUES</b>						
<b>Fiscal Year</b>	<b>City Contrib.</b>	<b>Share Plans Contrib.</b>	<b>Member Contrib.</b>	<b>Total Contrib.</b>	<b>Net Invest. Income</b>	<b>Total</b>
2000/2001	\$733,425		\$3,577,878	\$4,311,303	(\$38,313,700)	(\$34,002,397)
2001/2002	\$3,510,328		\$4,242,996	\$7,753,324	(\$1,027,634)	\$6,725,690
2002/2003	\$8,577,326		\$4,437,529	\$13,014,855	\$55,570,845	\$68,585,700
2003/2004	\$9,387,091	\$107,000	\$4,588,390	\$14,082,481	\$40,305,816	\$54,388,297
2004/2005	\$11,857,606	\$120,549	\$4,982,579	\$16,960,734	\$44,381,512	\$61,342,246
2005/2006	\$14,481,287	\$120,549	\$4,915,270	\$19,517,106	\$39,553,653	\$59,070,759
2006/2007	\$15,110,868	\$120,549	\$5,194,282	\$20,425,699	\$72,272,894	\$92,698,594
2007/2008	\$17,497,496	\$120,549	\$5,577,298	\$23,195,343	(\$58,943,570)	(\$35,748,227)

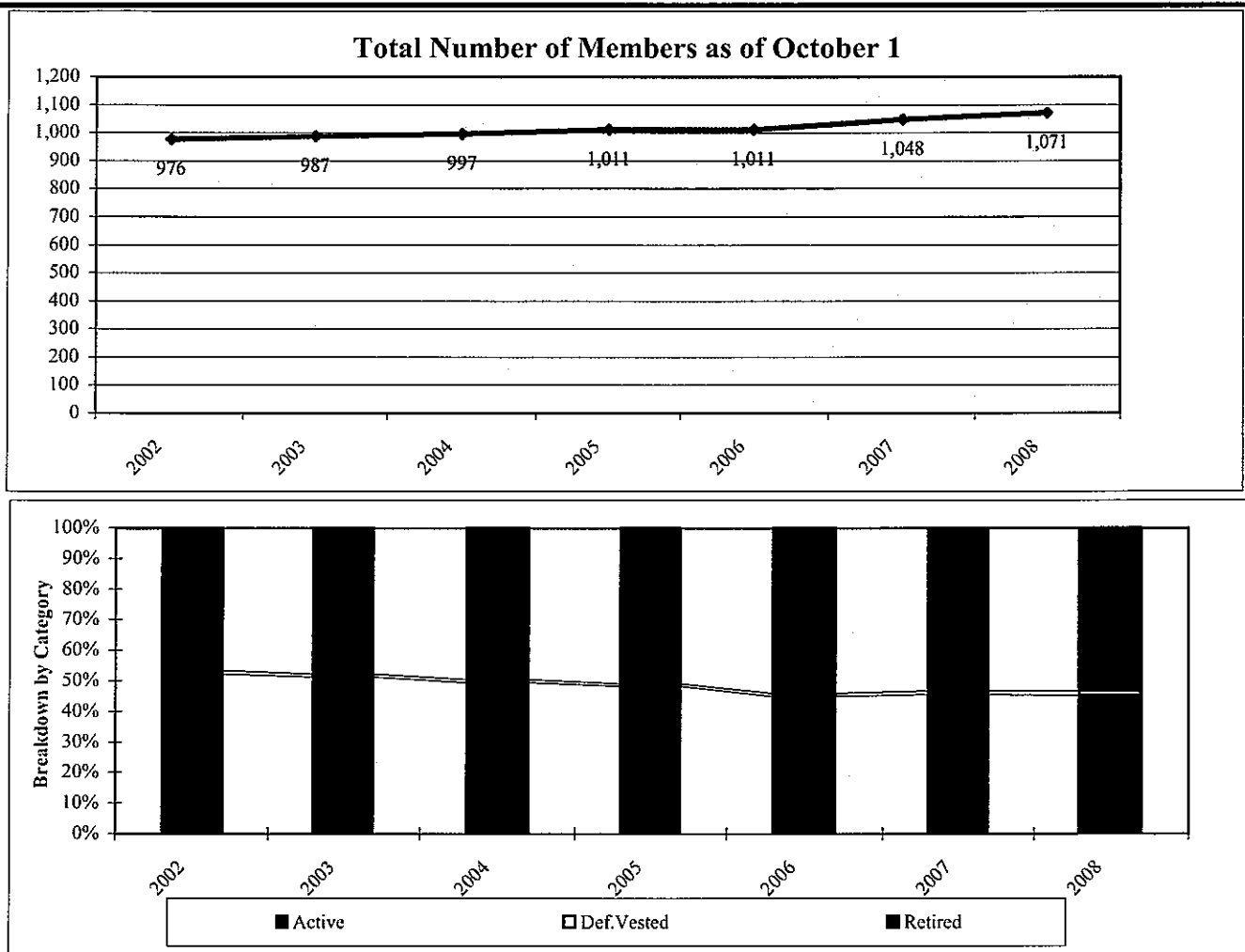
<b>EXPENSES</b>				
<b>Fiscal Year</b>	<b>Benefits Paid</b>	<b>Member Refunds</b>	<b>Administrative Expenses</b>	<b>Total</b>
2000/2001	\$18,999,180	\$75,154	\$526,157	\$19,600,491
2001/2002	\$20,107,750	\$102,885	\$498,825	\$20,709,460
2002/2003	\$21,919,356	\$153,018	\$521,173	\$22,593,547
2003/2004	\$24,130,299	\$43,039	\$564,532	\$24,737,870
2004/2005	\$27,168,740	\$33,960	\$581,953	\$27,784,653
2005/2006	\$30,048,732	\$60,497	\$633,113	\$30,742,342
2006/2007	\$32,241,728	\$125,574	\$646,588	\$33,013,890
2007/2008	\$34,912,004	\$102,655	\$641,844	\$35,656,503



\* Please reference Table VIIa on page 20 for the historical benefit payments, expenses, and contributions.

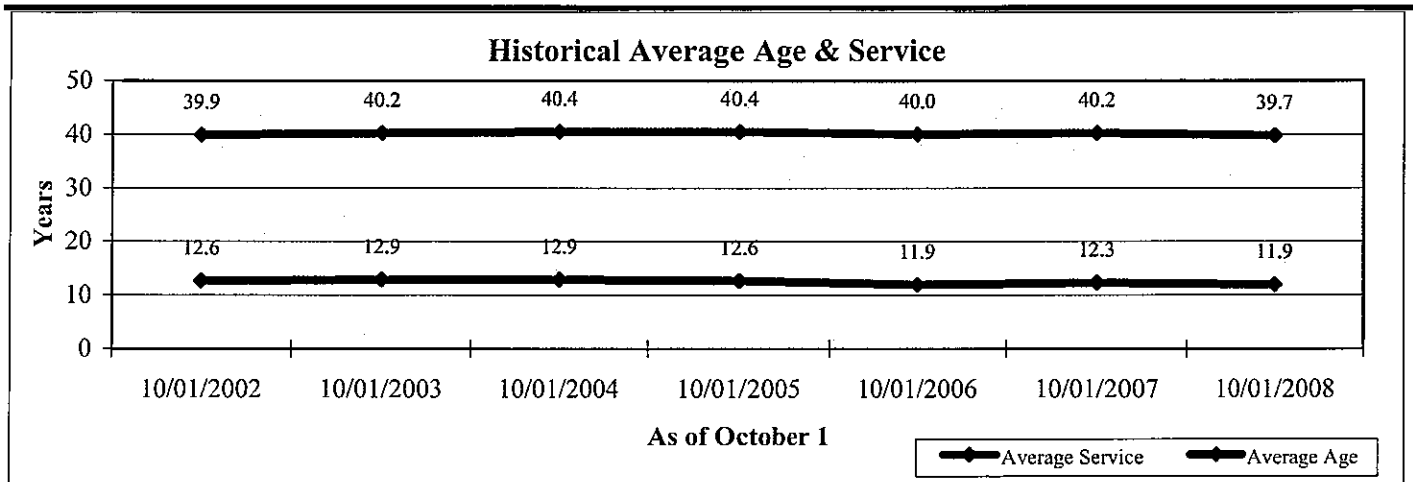
# SUMMARY OF MEMBER DATA

## TABLE IX

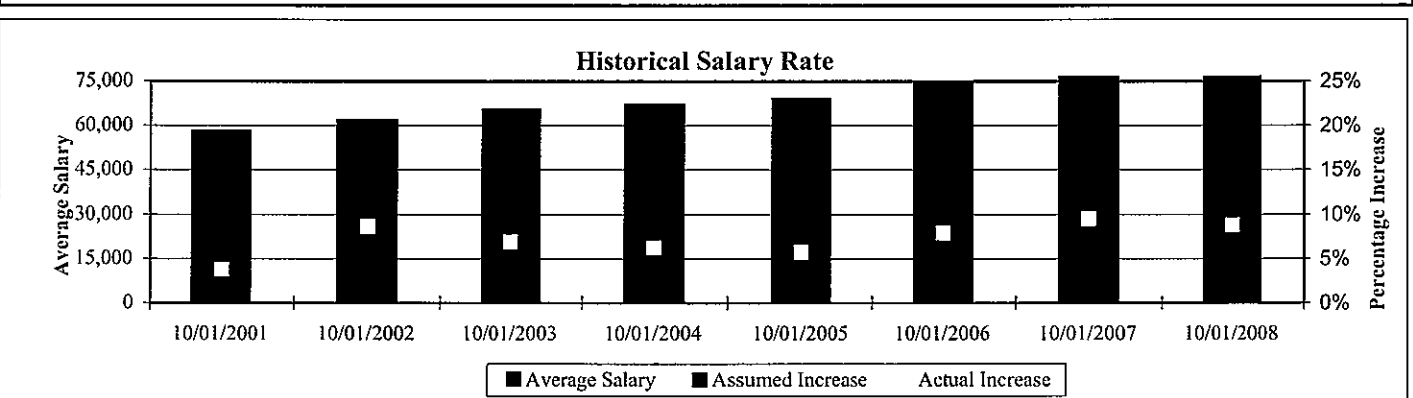


	As of October 1, 2007	As of October 1, 2008
<b>1. Active Members</b>		
a. Police Officers	317	319
b. Firefighters	165	168
c. Sub-total	<u>482</u>	<u>487</u>
<b>2. Non-active, Non-retired Members</b>		
a. Fully or partially vested	17	14
b. Beneficiaries	0	0
c. Sub-total	<u>17</u>	<u>14</u>
<b>3. Retired Members</b>		
a. Non-disabled(including DROP)	420	441
b. Disabled	61	62
c. Beneficiaries	91	98
d. Sub-total	<u>572</u>	<u>601</u>
<b>4. Total Members</b>	<u><u>1,071</u></u>	<u><u>1,102</u></u>

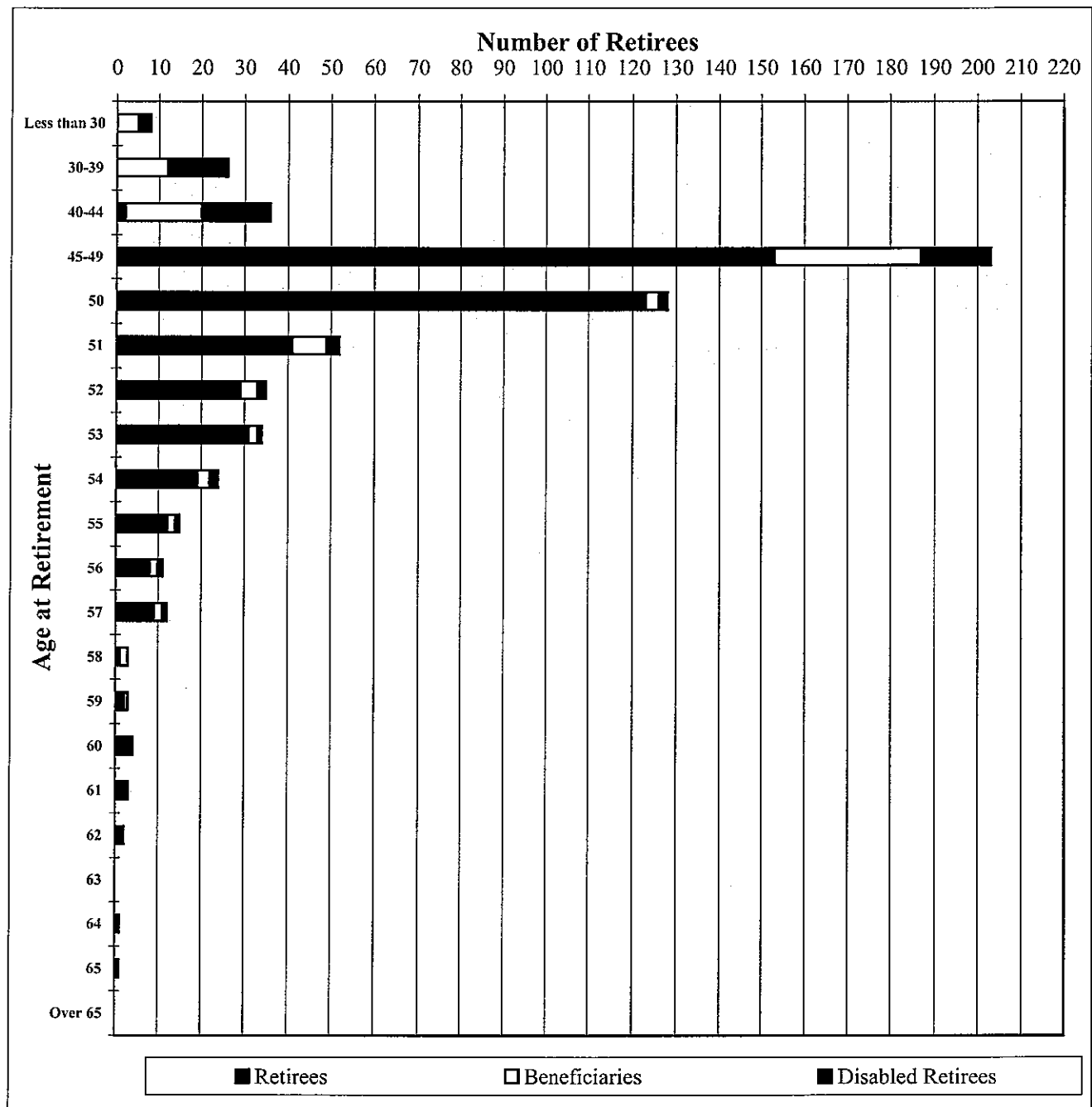




Date	Average Service Earned	Average Attained Age	Date	Average Service Earned	Average Attained Age
2001/2001	12.4	39.6	10/01/2005	12.6	40.4
10/01/2002	12.6	39.9	10/01/2006	11.9	40.0
10/01/2003	12.9	40.2	10/01/2007	12.3	40.2
10/01/2004	12.9	40.4	10/01/2008	11.9	39.7



Date	Average Salary	Actual Salary Increase	Average Assumed Increase	Date	Average Salary	Actual Salary Increase	Average Assumed Increase
10/01/2001	\$58,149	3.78%	4.81%	10/01/2005	\$68,855	5.73%	4.80%
10/01/2002	\$61,847	8.58%	4.82%	10/01/2006	\$74,275	7.87%	4.80%
10/01/2003	\$65,145	6.88%	4.82%	10/01/2007	\$80,302	9.48%	4.90%
10/01/2004	\$67,060	6.25%	4.82%	10/01/2008	\$83,495	8.77%	4.40%



Average benefit being paid to non-disabled retirees is \$6,032.92 per month.

Average benefit being paid to disabled retirees is \$4,181.42 per month.

Average benefit being paid to beneficiaries is \$1,856.42 per month.

	<u>Active</u>	<u>Non-active, Non-retired</u>	<u>Retired</u>	<u>Total</u>
<b>1. Number of members as of October 1, 2007</b>	<b>482</b>	<b>17</b>	<b>572</b>	<b>1,071</b>
<b>2. Change in status during the plan year:</b>				
a. Actives who terminated				
b. Actives who retired	(30)		30	
c. Inactives who became active				
d. Inactives who retired		(1)	1	
e. Retirees who became active				
f. Dormant				
<b>3. No longer members due to:</b>				
a. Death			(10)	(10)
b. Permanent break-in-service				
c. Receipt of lump sum payment	(1)	(2)		(3)
d. Expiration of certain period				
e. Included in error last year				
<b>4. New member due to:</b>				
a. Initial membership	36			36
b. Death of another member			8	8
c. Dormant				
d. Reinstatement				
<b>5. Number of members as of October 1, 2008</b>	<b>487</b>	<b>14</b>	<b>601</b>	<b>1,102</b>

**AGE-SERVICE-SALARY TABLE****TABLE IXd****(All Active Members)**

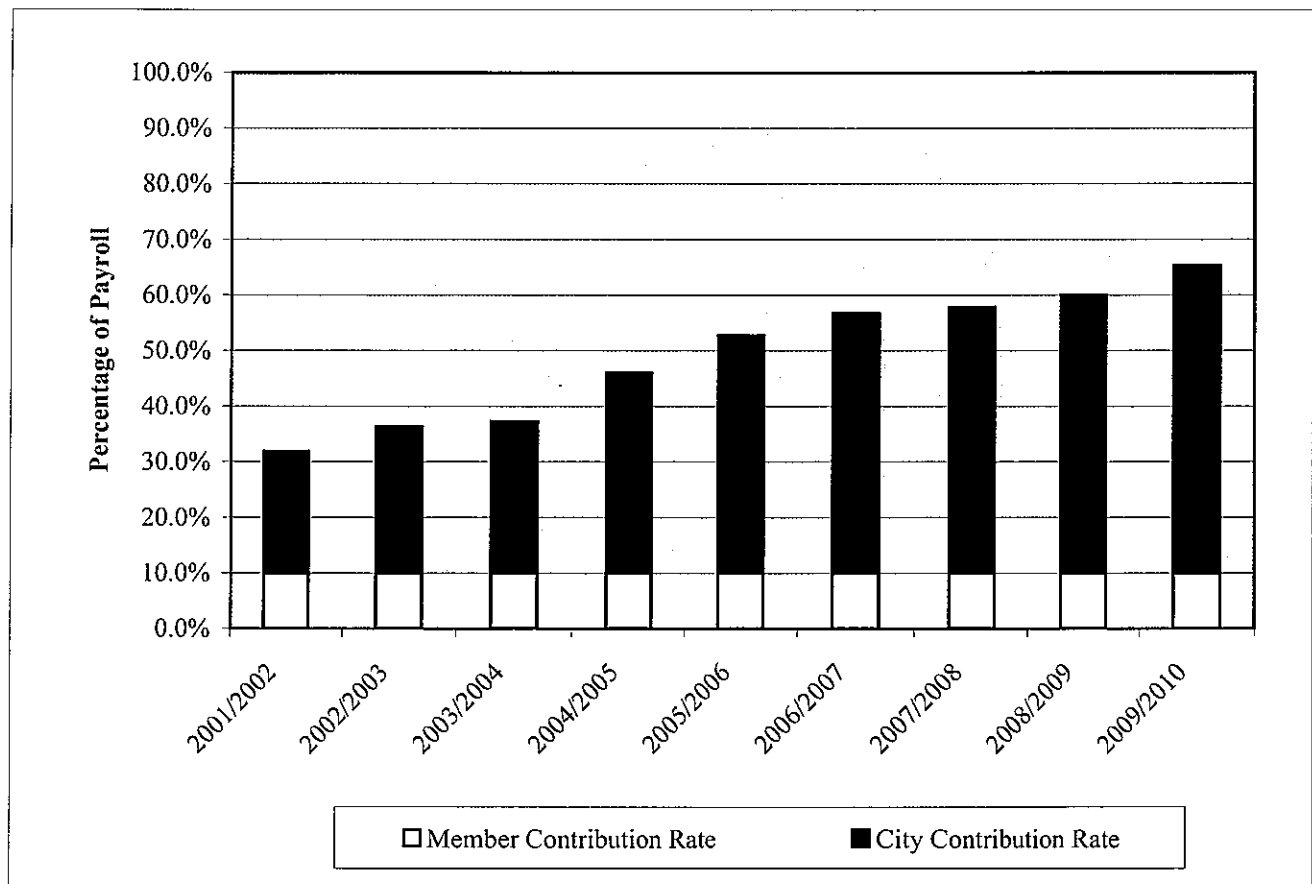
Attained Age	Completed Years of Service										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	
<b>Under 25</b>	5	5	0	0	0	0	0	0	0	0	<b>10</b>
Avg.Pay	58,140	60,959	0	0	0	0	0	0	0	0	59,550
<b>25 to 29</b>	12	27	13	0	0	0	0	0	0	0	<b>52</b>
Avg.Pay	57,125	62,377	79,225	0	0	0	0	0	0	0	65,377
<b>30 to 34</b>	8	21	34	2	0	0	0	0	0	0	<b>65</b>
Avg.Pay	55,711	62,636	79,646	67,113	0	0	0	0	0	0	70,819
<b>35 to 39</b>	2	21	44	34	3	1	0	0	0	0	<b>105</b>
Avg.Pay	54,434	62,774	77,733	88,038	94,172	80,233	0	0	0	0	78,128
<b>40 to 44</b>	3	7	25	44	28	20	1	0	0	0	<b>128</b>
Avg.Pay	54,405	63,358	80,218	84,327	101,347	108,151	89,135	0	0	0	89,160
<b>45 to 49</b>	0	1	10	13	22	47	2	0	0	0	<b>95</b>
Avg.Pay	0	72,883	82,189	86,080	94,901	106,690	126,682	0	0	0	98,626
<b>50 to 54</b>	0	0	3	4	6	9	1	0	0	0	<b>23</b>
Avg.Pay	0	0	74,131	86,021	100,175	104,853	147,393	0	0	0	98,200
<b>55 to 59</b>	0	0	1	2	2	2	0	0	0	0	<b>7</b>
Avg.Pay	0	0	69,456	82,697	107,261	88,703	0	0	0	0	89,540
<b>60 to 64</b>	0	0	0	0	1	1	0	0	0	0	<b>2</b>
Avg.Pay	0	0	0	0	112,569	80,372	0	0	0	0	96,471
<b>65 &amp; up</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0
<b>70 &amp; up</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>30</b>	<b>82</b>	<b>130</b>	<b>99</b>	<b>62</b>	<b>80</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>487</b>
Avg.Pay	56,466	62,670	79,056	85,519	98,971	105,739	122,473	0	0	0	83,495

**AGE-SERVICE-SALARY TABLE****TABLE IXe****(Police Officers)**

<b>Attained Age</b>	<b>Completed Years of Service</b>										<b>Total</b>
	<b>Under 1</b>	<b>1 to 4</b>	<b>5 to 9</b>	<b>10 to 14</b>	<b>15 to 19</b>	<b>20 to 24</b>	<b>25 to 29</b>	<b>30 to 34</b>	<b>35 to 39</b>	<b>40 &amp; up</b>	
<b>Under 25</b>	3	2	0	0	0	0	0	0	0	0	<b>5</b>
Avg.Pay	55,262	57,119	0	0	0	0	0	0	0	0	56,005
<b>25 to 29</b>	8	16	4	0	0	0	0	0	0	0	<b>28</b>
Avg.Pay	55,455	61,108	79,113	0	0	0	0	0	0	0	62,065
<b>30 to 34</b>	4	18	18	2	0	0	0	0	0	0	<b>42</b>
Avg.Pay	53,446	62,717	74,829	67,113	0	0	0	0	0	0	67,234
<b>35 to 39</b>	2	18	34	29	1	1	0	0	0	0	<b>85</b>
Avg.Pay	54,434	62,582	76,242	85,736	82,330	80,233	0	0	0	0	76,194
<b>40 to 44</b>	3	7	15	33	19	10	1	0	0	0	<b>88</b>
Avg.Pay	54,405	63,358	74,550	79,970	98,645	102,482	89,135	0	0	0	83,548
<b>45 to 49</b>	0	1	7	7	12	25	1	0	0	0	<b>53</b>
Avg.Pay	0	72,883	78,486	78,973	88,302	96,728	93,626	0	0	0	89,557
<b>50 to 54</b>	0	0	3	2	3	5	1	0	0	0	<b>14</b>
Avg.Pay	0	0	74,131	76,538	84,539	90,426	147,393	0	0	0	87,758
<b>55 to 59</b>	0	0	1	1	0	1	0	0	0	0	<b>3</b>
Avg.Pay	0	0	69,456	80,392	0	80,295	0	0	0	0	76,714
<b>60 to 64</b>	0	0	0	0	0	1	0	0	0	0	<b>1</b>
Avg.Pay	0	0	0	0	0	80,372	0	0	0	0	80,372
<b>65 to 69</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0
<b>70 &amp; up</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>20</b>	<b>62</b>	<b>82</b>	<b>74</b>	<b>35</b>	<b>43</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>319</b>
Avg.Pay	54,765	62,318	75,794	81,701	93,424	96,187	110,051	0	0	0	78,232

**AGE-SERVICE-SALARY TABLE****TABLE IXf****(Firefighters)**

<b>Attained Age</b>	<b>Completed Years of Service</b>										<b>Total</b>
	<b>Under 1</b>	<b>1 to 4</b>	<b>5 to 9</b>	<b>10 to 14</b>	<b>15 to 19</b>	<b>20 to 24</b>	<b>25 to 29</b>	<b>30 to 34</b>	<b>35 to 39</b>	<b>40 &amp; up</b>	
<b>Under 25</b>	2	3	0	0	0	0	0	0	0	0	<b>5</b>
Avg.Pay	62,458	63,519	0	0	0	0	0	0	0	0	63,095
<b>25 to 29</b>	4	11	9	0	0	0	0	0	0	0	<b>24</b>
Avg.Pay	60,465	64,222	79,275	0	0	0	0	0	0	0	69,241
<b>30 to 34</b>	4	3	16	0	0	0	0	0	0	0	<b>23</b>
Avg.Pay	57,976	62,148	85,066	0	0	0	0	0	0	0	77,365
<b>35 to 39</b>	0	3	10	5	2	0	0	0	0	0	<b>20</b>
Avg.Pay	0	63,926	82,801	101,392	100,093	0	0	0	0	0	86,347
<b>40 to 44</b>	0	0	10	11	9	10	0	0	0	0	<b>40</b>
Avg.Pay	0	0	88,721	97,398	107,050	113,820	0	0	0	0	101,506
<b>45 to 49</b>	0	0	3	6	10	22	1	0	0	0	<b>42</b>
Avg.Pay	0	0	90,828	94,371	102,819	118,011	159,737	0	0	0	110,069
<b>50 to 54</b>	0	0	0	2	3	4	0	0	0	0	<b>9</b>
Avg.Pay	0	0	0	95,504	115,811	122,886	0	0	0	0	114,443
<b>55 to 59</b>	0	0	0	1	2	1	0	0	0	0	<b>4</b>
Avg.Pay	0	0	0	85,002	107,261	97,110	0	0	0	0	99,159
<b>60 to 64</b>	0	0	0	0	1	0	0	0	0	0	<b>1</b>
Avg.Pay	0	0	0	0	112,569	0	0	0	0	0	112,569
<b>65 &amp; up</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0
<b>70 &amp; up</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>10</b>	<b>20</b>	<b>48</b>	<b>25</b>	<b>27</b>	<b>37</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>168</b>
Avg.Pay	59,868	63,761	84,630	96,823	106,161	116,840	159,737	0	0	0	93,488



Fiscal Year	Member Contribution Percentage	Expected City Contribution Percentage	Fiscal Year	Member Contribution Percentage	Expected City Contribution Percentage
2001/2002	10.00%	21.88%	2006/2007	10.00%	46.71%
2002/2003	10.00%	26.29%	2007/2008	10.00%	47.82%
2003/2004	10.00%	27.27%	2008/2009	10.00%	50.02%
2004/2005	10.00%	36.03%	2009/2010	10.00%	55.32%
2005/2006	10.00%	42.75%			

**1. Actuarial Cost Method**

- Entry Age Normal Cost Method

**2. Decrements**

- **Pre-Retirement Mortality**

Representative values of the assumed annual rates of pre-retirement mortality among members in active service are as follows:

Age	Ordinary Mortality Rate	Accidental Mortality Rate	Age	Ordinary Mortality Rate	Accidental Mortality Rate
20	.0017	.0002	45	.0055	.0006
25	.0018	.0004	50	.0077	.0009
30	.0020	.0005	55	.0114	.0003
35	.0030	.0005	60	.0178	.0002
40	.0043	.0005	64	.0264	.0001

- **Post-Retirement Healthy Mortality**

1983 Group Annuity Mortality Table

- **Post-Retirement Disabled Mortality**

1983 Group Annuity Mortality Table

- **Disability**

Representative values of the assumed annual rates of disability among members in active service are as follows:

Age	Ordinary Disability Rate	Accidental Disability Rate	Age	Ordinary Disability Rate	Accidental Disability Rate
20	.0004	.0003	45	.0032	.0026
25	.0006	.0005	50	.0055	.0044
30	.0009	.0007	55	.0079	.0063
35	.0012	.0010	60	.0110	.0090
40	.0018	.0014	64	.0143	.0126



**ACTUARIAL ASSUMPTIONS****TABLE XI**

- **Permanent Withdrawal from Active Status**

Representative values of the assumed annual rates of withdrawal among members in active service are as follows:

Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	10.30%	30	4.15%	40	0.99%	45	0.48%
25	7.30%	35	1.82%				

- **Retirement**

All members are assumed to retire at age 50 with 26.25 years of service, but not later than age 65. Members under age 50 meeting the Rule of 70 are assumed to retire at the rate of 40% per year. Otherwise, retirement is assumed to occur in accordance with the following rates:

Age	Rate	Age	Rate	Age	Rate	Age	Rate
45	30.00%	51	35.00%	56	30.00%	61	45.00%
46	20.00%	52	25.00%	57	30.00%	62	45.00%
47	25.00%	53	25.00%	58	25.00%	63	55.00%
48	25.00%	54	30.00%	59	35.00%	64	85.00%
49	25.00%	55	30.00%	60	45.00%	65	100.00%
50	35.00%						

Note: Ages under 50 apply only if eligible for Rule of 70

### 3. Interest Rates

- **Used for Calculating All Liabilities (including GASB 25/27 liabilities)**

8.40% per annum. This interest rate is assumed to be net of investment expenses and commissions

### 4. Salary Increases

Representative values of the assumed annual rates of future salary increase are as follows:

Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	9.67%	35	4.30%	50	4.06%	60	4.36%
25	7.80%	40	4.10%	55	4.12%	65	4.65%
30	5.25%	45	4.03%				

Average assumed salary increase rate is 4.4%

**5. Loadings for Contingencies**

- **Compensation**

Salary rates have been increased by 7.50% to load for overtime and other pays.

- **Pre-Employment Service**

A City contribution of 6.00% of loaded compensation is assumed sufficient to provide for the purchase (or “buyback”) of pre-employment service by the membership.

**6. Marriage Assumptions**

- **Percent Married**

77% of members are assumed married or entitled to benefits for dependents, including registered domestic partners.

- **Age Difference Between Spouses**

Male spouses are assumed to be three years older than female spouses.

**7. Expenses**

Anticipated administrative expenses, *exclusive* of investment expenses and commissions, are assumed to be funded through future City normal contributions. In addition, the interest rate set forth in item 3 above is assumed to be net of investment expenses and commissions.

**8. Assets**

Actuarial value of assets is equal to the market value of assets adjusted to reflect a five-year phase-in of the net investment gain or loss. At October 1, 2005, the “fresh start method” using the current market value of assets and starting a new five year phase-in of realized and unrealized gains and losses was implemented, recognizing one year of asset performance in the actuarial value of assets.

**9. Aggregate Compensation**

The aggregate compensation used to compute the accrued liability contribution rate was assumed to increase at a rate of 3.50% per year.

The following assumptions have been changed during the past few years:

1. Effective October 1, 2002:

The actuarial cost method was changed from frozen initial liability to entry age.

2. Effective October 1, 2002:

The amortization of the unfunded accrued liability was changed from level dollar to level percentage of pay, with aggregate payroll assumed to increase at 3.50% per year

3. Effective October 1, 2005:

The “fresh start” method was applied to the actuarial value of assets to begin a new five-year phase-in of realized and unrealized gains and losses.

The retirement rates were increased to reflect retirement experience for participants meeting the age 50 and “Rule of 70” eligibility criteria.

The loadings for contingencies and pre-employment service were increased from 5.00% to 7.00% and from 4.50% to 5.50% respectively.

4. Effective October 1, 2006:

The actuarial valuation system used by Buck Consultants was upgraded effective October 1, 2006. The gain resulting from this upgrade was amortized over 30 years.

5. Effective October 1, 2008:

The interest rate used to calculate all liabilities was reduced to 8.40% from 8.50%.

The salary scale used to project future pay increases was reduced by 50 basis points at each age to reflect the current and projected economic climate.

The loadings for contingencies were increased by 100 basis points (50 basis points for salary rates and 50 basis points for buybacks).

The retirement assumption was updated to reflect an increase in the level of retirements starting at age 45.

**1. Monthly Accrued Benefit**

3% of average monthly salary multiplied by service up to 15 years, plus 4% of average monthly salary multiplied by service in excess of 15 years, to a maximum monthly benefit of 90% of average monthly salary. If the member was employed prior to July 1, 1976, the benefit can be no less than that provided by the prior Base Plan assuming its provisions continue after its merger with the prior Supplemental Plan ("grandfathered Base Plan benefit").

Average monthly salary is based upon the highest two years of compensation. A limited portion of overtime pay is included in the average monthly salary except when calculating the grandfathered Base Plan benefit referred to above.

**2. Service Retirement Age and Benefit**

- **Age**

Age 50 or, if earlier, the date when age plus service equals 70 (Rule of 70); Retiring members may also be eligible to enter the DROP (Deferred Retirement Option Plan).

- **Amount**

Monthly Accrued Benefit

- **Form of Payment**

For members except those retiring prior to November 5, 2003, the normal form of payment is a 75% joint and survivor annuity with a designated beneficiary as provided under the plan, which includes 120 guaranteed monthly payments.

The members may also elect the actuarial equivalent of the 10 year certain and life annuity, with a designated beneficiary, any of the following optional forms of payment:

- 75% joint and contingent survivor annuity
- 66 2/3% joint and contingent annuity with a designated beneficiary
- 50% joint and contingent annuity with a designated beneficiary
- 25% joint and contingent annuity with a designated beneficiary
- 10 year certain and life annuity with a designated beneficiary

Members who retired prior to November 5, 2003 were subject to different normal and optional forms of payment.

**3. Disability Retirement Age and Benefit**

- **Condition**

For a service connected disability benefit, the member must become totally and permanently disabled in the line of duty;

For a non-service connected disability benefit, the member must otherwise become totally and permanently disabled and have at least five years of service.

- **Amount**

For a service connected disability benefit:

Monthly Accrued Benefit, with a minimum benefit of 85% of compensation.

For a non-service connected disability benefit:

Monthly Accrued Benefit.

**4. Withdrawal Retirement Age and Benefit**

- **Age**

Any age prior to 50 with at least 10 years of service;

- **Amount**

Monthly Accrued Benefit (payable if participant survives to Service Retirement Age);

- **Form of Payment**

For members except those retiring prior to November 5, 2003, the normal form of payment is a 75% joint and survivor annuity with a designated beneficiary as provided under the plan, which includes 120 guaranteed monthly payments.

The members may also elect the actuarial equivalent of the 10 year certain and life annuity, with a designated beneficiary, any of the following optional forms of payment:

- 75% joint and contingent survivor annuity
- 66 2/3% joint and contingent annuity with a designated beneficiary
- 50% joint and contingent annuity with a designated beneficiary
- 25% joint and contingent annuity with a designated beneficiary
- 10 year certain and life annuity with a designated beneficiary

Members who retired prior to November 5, 2003 were subject to different normal and optional forms of payment.

**5. Death Benefits**

- **Service connected death benefit**

Greater of Monthly Accrued Benefit and 85% of compensation payable as a monthly benefit to the widow until death, to unmarried children in equal shares until age 18 (until age 22 if a full-time student or until recovery from disability if disabled), or to dependent parents in equal shares.

- **Non-service connected death benefit**

For members with at least five years of service, Monthly Accrued Benefit is payable for the first 12 months after death and 75% of the Monthly Accrued Benefit is payable thereafter (with a minimum benefit of 25% of average monthly salary); benefits are payable to the widow until death or remarriage, to unmarried children in equal shares until age 18 (until age 22 if a full-time student or until recovery from disability or until marriage if disabled), or to dependent parents in equal shares. However, if the member has been married for less than ten years, benefits are payable to the spouse only for the life expectancy of the deceased member at time of death.

**6. Employee Contributions**

10% of salary per year (on a pre-tax basis);

If contributions are refunded to the member or to his beneficiaries, then interest is credited at the rate of 3% per annum.

**7. Pre-Employment Service**

Members with at least 20 years of service may purchase up to four total years of additional service credit at the 3% accrual rate for time spent on active military duty or other full-time public safety service for which no other benefit is payable. Also, such member may purchase an increase in benefit of 3% or 6% without purchasing service. Members purchasing other than military service must also be eligible to retire. The total of any combination of pre-employment benefit purchased is 12% increase in accrual.

**8. Cost-of-Living Adjustment**

Benefits are increased by 2.5% per year, compounded annually, each October 1 after retirement, adjusted for partial years; members whose grandfathered Base Plan benefit is greater than the benefit otherwise provided by this plan will receive the applicable cost-of-living adjustment on that basis (2% a year beginning the October three years after retirement) until such time as the benefit from this plan with 2.5% cost-of-living exceeds that comparable grandfathered Base Plan benefit.

**9. Deferred Retirement Option Program (DROP)**

Police Officers and Firefighters are eligible to participate in a Deferred Retirement Option Program (DROP) upon meeting any one of the following criteria:

- the attainment of age 50 or
- the sum of the member's age and creditable service equal to at least 70

Operation of the DROP

- The member's monthly retirement benefit, based on final average earnings and service, will be calculated as of the date prior to them entering the DROP.
- The member's monthly pension will be deposited into the selected investment vehicles.
- The member will cease to accrue additional pension benefits (with the exception of the COLA under the pension plan).
- The member will no longer be eligible for Disability or Service Connected Death benefits from the Pension Plan.
- Member contributions to the Pension Plan will cease upon entering the DROP.
- Upon entering the DROP, the member will select the length of the DROP period. The maximum period of participation in the DROP is 36 months. Notwithstanding, participation may not continue beyond the date when the member's combined years of creditable service and time in the DROP equals 352 months (387 months if they were a member prior to July 1, 1976).
- The member will not have access or be able to borrow against any of the funds accumulated in their DROP account.
- The member may sever his/her employment with the City at any time during the DROP period. Such separation will terminate their participation in the DROP.
- No payment will be made from the DROP account until the member severs their employment with the City
- Following severance of employment, the funds in the DROP will be paid under the options the member selected. The member will also start receiving their monthly pension which was previously being deposited in the DROP.

The following amendments have been made:

1. Effective September 30, 2000, members of the post-May 18, 1993 plan were merged into the pre-May 19, 1993 benefit schedule.
2. Effective November 6, 2001, domestic partners of members registered with the City of Miami Beach are entitled to survivor benefits under the Fund.
3. Effective November 6, 2001, members with at least 20 years of service and eligible to retire may purchase certain prior public safety service or purchase an increased benefit. Total accrual from purchase of service, including military time, cannot exceed 12%.
4. Effective November 5, 2003, the normal form will include 120 guaranteed monthly payments.